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Vol. IX
No. 4

The Educational SCREEN

April, 1930

In This Issue

The Use of Motion Pictures in Business Courses

Visual Education in Europe (V) Munich
A critical survey of visual instruction activities in leading European centers and institutions.

Motion Pictures in a Junior High School

"The Film Estimates"
The unique monthly review service on theatrical motion pictures.

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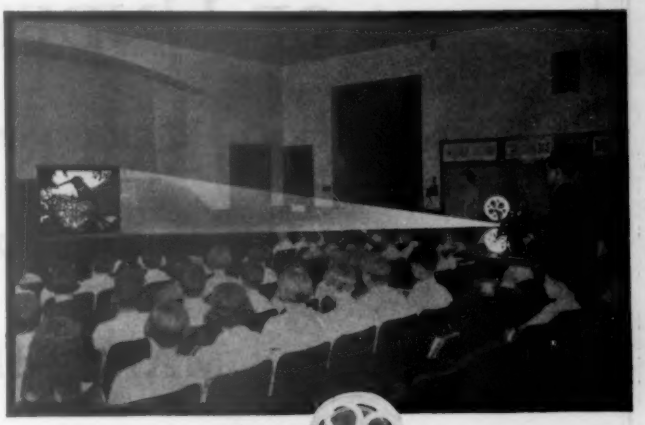

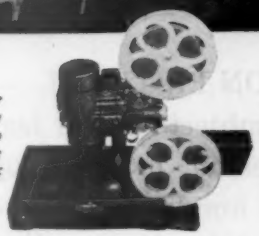

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VOLUME IX NUMBER 4

THE EDUCATIONAL SCREEN

The Only Magazine Devoted to The New Influence in National Education

APRIL, 1930

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Visual Education in Europe (V) Munich

W. M. Gregory
Director Educational Museum, Cleveland Public Schools

The Deutsches Museum

THE Deutsches Museum of Munich illustrates the modern point of view that a museum is for educational service. The old museum idea was that of a storehouse of rare and costly objects; and the people were invited to come and look. The modern museum has its exhibits so arranged that the people may come and learn by using them. The Deutsches Museum is Germany's answer to the modern problem of the effect of machines upon life. The machine basis of modern civilization is its theme. There is no conscious effort to make it a museum, but each room shows the material and the machines which produce certain results. Such exhibits have an important place in the life of each community as they present a vivid history of the mechanical progress of man.

Founded in 1905

In 1905 Dr. Oscar Von Miller perceived the lack in modern education of an understanding of science and its social influences. He founded the Deutsches Museum at Munich to give an inspiring point of view to Germany in science and industry. The institution has grown amazingly and now has 340 exhibit rooms in the main building. It has an annex for large trade exhibits and likewise a complete scientific and commercial library.

A Hall of Fame for Germany's Scientists

The exhibit halls are arranged around the central hall of fame which contains statues and paintings illustrating the achievements of Germany's most famous scientists as Gutenberg, Kepler, Bunsen, Liebig, Leibnitz, Krupp, Helmholtz, Hertz, Ohm, Fraunhofer, Zeppelin and others. In the United States our youth should have the full benefit of the inspiration that comes from what has been done by Edison, Wright, Westinghouse, Morley, DeWitt Clinton, Peter Cooper, Brush, and others. To dramatize their achievements is a necessary part of education.

The main building contains besides the hall of fame, a barometer and thermometer tower, astronomical observatory and a planetarium.

A Scriptorium

The barometer can be read from a considerable distance and the mammoth thermometer gives the temperature to the passerby.

Exhibits That Move

A museum dedicated to science would be a failure if it were a collection of old machinery, hence in the Deutsches Museum all the machines move. Each visitor can put a machine in operation if he so desires by pushing a button. The oldest of the engines as well as the most modern may be operated in this manner. Puffing Billy puffs and Watt's Old Betsey wheezes and groans.

Skillful Visual Exhibits

It is important to grasp the principles that determine the contents of the different displays. The primitive beginning of each industry is fully emphasized and easily grasped by the visitor who can follow the development of each improvement through the ages. Sometimes these advances were very slow because fact and principles must be discovered and applied. All the visual aids are used in making impressive the ideas involved. The clever use of the model, diagram, label, colored photograph, plan, statistics and motion picture is what makes the displays of this museum outstanding and attractive. These exhibits should be studied by those interested in advancing popular science in this country.

Paper Making

All the steps in making paper through the ages are shown by models and excellent painted panels. Then comes a thrill to see an original paper mill of 1700 in operation. All of the simple operations involved in making paper are seen and the crude machinery operates as it did nearly three hundred years ago. Small models which are working show the evolution from the old mill to the modern paper making machinery. The use of wood, papyrus, linen, cotton and other fibers for paper manufacture is shown. Germany's paper industry is very intelligently presented. The scriptorium is a model of a monk's cell where copying of the ancient manuscript was done.

Gutenberg's printing room and press are reproduced in exact size. The development of many different phases of printing and printing processes is shown in a series of

working models. Germany is a leader in color reproduction and the processes are fully displayed. The interested reader could easily vision what this country could contribute to the evolution of printing in Benjamin Franklin's first press with his composing table; the first steam printer and the modern rapid multiple presses. The quill pen and the American typewriter have an important part in writing development.

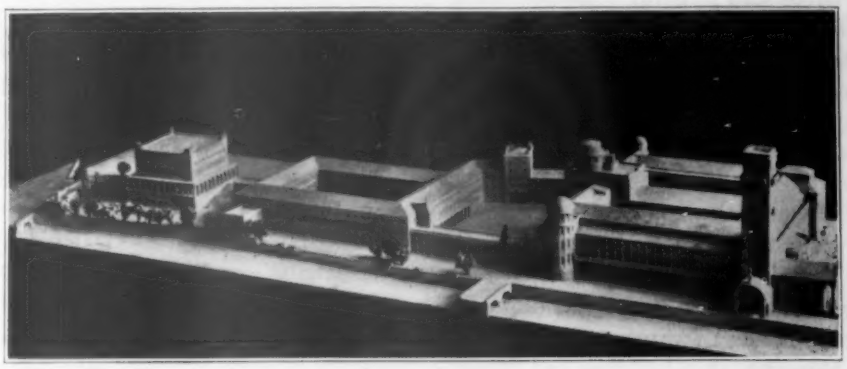
Geology Hall

In the Geology Hall of the Deutsches Museum is a cross-section of the earth at Munich which occupies one side of the hall. The rock strata are built of the actual bed rock. The explanations in pictures and labels all combine to give an excellent idea of local formations.

The economic phases are illustrated by the first crude mining shaft and pits. Exact duplicate of a chamber of the Salzburg salt mines is arranged so that one may descend into it and observe the primitive methods once employed. There are two other mines shown by full-sized shafts, drifts and gallery, built in the basement of the museum. The attempt to drain and ventilate the first mines is clearly shown. The ancient man-tread pump is working beside a modern electric pump. The step-hoists and the modern electric hoist illustrate the effort to aid man by mining with new machinery. There are working models of primitive rock-crushers and separators operated by hand. The first crude hand blast for ore smelting introduces metallurgy. An old bloomery with trip hammers operated by water power is an introduction to old and new methods of iron puddling.

The primitive blacksmith's shop of 1803 and the first water-blast furnace all serve as background for Germany's modern iron industries. The splendid models of the Krupp plant represent Germany's great advances. Clear diagrams show modern Germany's place in iron and steel production. It is an inspiration to obtain within a reasonable time a comprehensive grasp of mining as applied to the geological resources of Germany.

The reader can obtain views of any displays. In the small size twelve pictures can be purchased for 1.20 mark and the large size for 1.50 mark each. Catalogs may be obtained from Director Miller. The writer will gladly supply to those interested, numbers of photographs in any of the fields of applied sciences.



The Deutsches Museum, Munich

Clocks and Time Devices

The evolution of time-telling devices through the ages is represented by many styles of water-clocks, hour glasses, sun-dials, etc. The first of the wooden clocks made by Gerbert in the tenth century, is represented by an original. The application of the escapement movement by DeVick and Galileo's pendulum to the clock were great improvements. Then comes Peter Henlein who made the "Nuremberg Egg" which had only an hour hand. The modern time devices and chronometers are represented by a variety of time pieces from tower clocks to the world's most accurate astronomical clocks. In one hall is the famous Munich clock which shows the time and the movements of the earth, stars, planets, sun, etc. This is the most elaborate time device in the museum and is the master control for Munich time pieces.

Chemistry and Chemical Industries

The remarkable growth of industrial chemistry in Germany is represented in the Deutsches Museum in fifteen rooms, which cover all phases of chemical knowledge from the old alchemist to the modern worker in synthetic compounds. The first experiments of Bunsen and others are so arranged that they may be repeated by the observer. The original apparatus for many pioneer discoveries are arranged so that experiments may be easily repeated by touching a button. The spectrum of different gases is thus easily observed. The distillation of water, a flame test for various metals and the oxo-hydrogen flame are arranged as experiments to be performed at the pleasure of the visitor.

In theoretical chemistry many rod and ball models both of the molecule and the atom are arranged on a large scale so the student may study visually the difficult formulae of many compounds.

Organic chemistry is given skillful attention in remarkable diagrams, pictures, and models to represent the achievements of Germany in this difficult field. The coal tar industry is shown from its initial beginning to the complicated

processes involved in modern coal tar distilling. In one room the entire wall is devoted to the coal tar products, among which are aspirin, vanilla, indigo, saccharine and several hundred others.

The exhibits of pharmaceutical chemistry show the source of many common drugs. The restored ancient pharmacy is stocked with herbs and mineral remedies alongside of which there stands the modern pharmacy with its remedies derived entirely from coal tar.

Shipping in Munich

Munich is five hundred miles from the sea but in the Deutsches Museum there is a remarkable collection of ships and shipping. The evolution of water transportation is shown from the simple dugout to the modern steamer. All phases of shipping, ship-building and navigation are given prominence in the water transportation displays. The ocean steamer is presented by actual cross-section of engine, hull, etc. So complete are the ship displays that a course of navigation may be conducted entirely in the museum. Munich is about the same distance from the sea as Cleveland. These displays which are so far inland are perhaps the stimulation that has caused German shipbuilding to advance so rapidly and in such an effective manner.

The People Are Interested

The exhibits in the Deutsches Museum attract the people in large numbers. This interest is due to the attractive and dramatic setting given the principles of science as they are applied in modern life. The scientific fundamentals are so displayed that their application in industry is obvious. Where the wonders of modern engineering are displayed, interest is always aroused. While some methods of modern industry are very complex it is interesting to see how these have developed from simple conditions.

Industrial Museums In America

Industry in America must give the mass of people a greater appreciation of science. The non-technical person should have enough of scientific ideas to make him intelligent in this machine world. The worker needs the fundamental ideas of science which makes possible the machine which he controls.

New Museum Plans in United States

In the United States we are making extensive plans for industrial museums. Mr. Henry Ford, at Dearborn, Michigan, has under way a dramatic presentation of industrial evolution in this country. The story of the growth and the place of machine in life is told by remarkable working collections of pioneer and modern machines.

In Chicago Mr. Walgmar Kaempffert is bringing into existence the Rosenwald Industrial Museum which will reveal the technical ascent of man. It is intended to make this an educational institution that will make clear the social results of the application of science to industry.

In New York the Museum of Peaceful Arts will demonstrate the remarkable progress in industry due to technological research. Dr. F. C. Brown, the director, has tried to dramatize the latest scientific discoveries and their possibilities in industry. The purpose includes illustrations of man's endeavors from earliest time to the present. The visual working exhibit is to be used to impress the visitor with the importance of science in modern life.

The Franklin Institute in Philadelphia has commenced its plans for a memorial to Benjamin Franklin in which the application of science to industry is the special scheme. Mr. Howard McClenahan, the secretary of the Franklin Institute, has plans for grouping about the original apparatus of Franklin, the dramatic story of electrical discoveries and the application of these ideas to industry. The Institute has other original science apparatus which will form part of the displays which will be installed in the new building.

Industrial Museum in Cleveland

An Art Museum is the cultural center for a community. If the Art

An Ancient Water Mill

Museum is necessary, then a scientific museum which gives people enjoyment and understanding of their daily work is a very essential institution.

The Industrial Museum should be a great scientific center in a city like Cleveland whose growth and wealth has been from the development of great enterprises whose success has depended upon scientific knowledge. The daily life of the people in Cleveland is closely related to the modern application of science in industry. Cleveland's youth should know what her leaders in science have done. Charles Brush and the electric arc, Alexander Winton and the motor car, Warner and Swazey, builders of great telescopes; the giant ore unloading machines by Hulett, the revolutionary iron working devices of Wellman and many others. Bridge-builders,

(*Concluded on page* 122)

Motion Pictures in a Junior High School

CLIFFORD S. BRAGDON
Principal Central Junior High School, New Rochelle, New York

SOME may contend that the use of Motion Pictures in schools is just another modern fad for the purpose of amusing the pupils. My experience shows that, with careful planning and proper selection of material, motion pictures may prove a distinct improvement over older methods of instruction as well as an important supplement to other approved methods of classroom teaching. I shall endeavor to prove these two assertions by describing the plan used in my school, a Junior High School of nine hundred pupils.

First, let me state that our auditorium is equipped with two first-class machines in an asbestos lined booth for standard 35 mm. films. But the inconvenience of securing a licensed operator, as required, during school hours, and the expense of rentals of standard films combined to keep the machines idle except for an occasional assembly program or a program for which an admission fee was charged after school hours. It was not until our Parent-Teacher Association presented our school with a Bell & Howell Filmo projector for 16 mm. films that the value of motion pictures in teaching History, Geography, Science, and Health began to be realized.

We found that the operation of this projector was so simple that almost any teacher, or even a Junior High boy with some mechanical aptitude could readily learn to operate it, thus making it possible to use the projector at any time, a most important factor in any teaching device.

We also found that there was an abundance of excellent educational films available in the 16 mm. size and at a low rental so that the expense was not a deterrent factor. Moreover, a trial proved that this type of projector was equally adapted to a single classroom or to a group of several hundred in the auditorium.

Our plan of procedure was as follows: all teachers were supplied with an outline of the proposed film program with subjects and tentative dates for each film; also with a digest of the important features of each film several days before it was to be shown. This made it possible to arrange the classroom teaching so as to prepare the pupils for the film, thus bringing them to the auditorium in an excellent attitude and eager to find out for themselves what they had already been taught to look for.

If a Geography film was to be shown, all seventh-grade pupils went to the auditorium and witnessed the showing of the film, the total time required being about twenty-five minutes or one-half of the period. Then all went back to their respective rooms where the main features of the film were discussed, checked up with the outline previously given, and thus fixed in mind, as we believe, more firmly than would have been possible by class-room study alone. If a History film was to be shown, then all eighth-grade pupils were sent to the auditorium and a similar procedure followed.

The Science films were shown to seventh, eighth, or ninth grade groups, according to the nature of the film and its bearing upon the class work. Sometimes two grades would be combined.

Not less interesting and valuable from the teaching point of view were the films on health and hygiene, reenforcing in a most effective manner the teaching of the physical training instructors concerning posture, diet, exercise, communicable diseases, etc.

When the series as planned came to an end, the pupils were asked to write frankly their opinions of the value of the films to them. They were unanimous in saying that they had not only enjoyed them, but had received much benefit from them. Furthermore, they recommended that more films be used in the following year.

But the greatest thrill of all came as a climax to the program described above, when we borrowed a motion picture camera and made a film in which our own pupils were the actors. Every Junior High School has clubs for improving the social contacts of its pupils, as well as for putting more life into classroom activities. Our Classical Club worked out a simple yet interesting project based on "The Story of Atalanta". About thirty-five pupils took part, in costumes made by themselves with some help from their parents. Five scenes were produced, depicting: first, Atalanta's Childhood; second, Consulting the Oracles; third, The Suitors; fourth, The Race, including the Episode of the Golden Apples; fifth, The Wedding. When these films were shown to the entire school in an assembly, the enthusiasm was indeed intense and we realized as never before the possibilities of motion pictures in arousing interest in all phases of school activity. One very practical result of this experiment was the interest aroused among the parents so that our Parent-Teacher Association voted money for the purchase of a good motion picture

camera in order that more might be done along this line.

While the foregoing gives the favorable reaction of one Junior High School to a series of rented films, I can see still greater possibilities for this form of teaching from a library of films owned by a school or school system. By this method, films would be more accessible and could be kept long enough in any school so that each teacher might show them to her own pupils in her own class-room. This arrangement would upset no class schedules, since there would be no combination of classes needed and would permit of greater teacher freedom in presenting the subject matter as well as in the selection of films to be used. Such an arrangement, though too expensive for small school systems, might prove more economical than renting in a city of 50,000 or more people.

In conclusion, let me state my firm conviction that our experience proved beyond question the value of educational films as a teaching device in a Junior High School.

The Use of Motion Pictures in Business Courses

J. G. GLOVER
Department of Management, New York University

IN ABOUT 1919 the motion picture was first introduced to American schools for the purpose of instruction. Since that time many advantages have been brought to light by this method of visual instruction.

The writer is interested in setting forth a method of presenting commercial work by use of motion pictures, a method which gives the student a better and more vivid conception of business processes.

The Department of Management of the School of Commerce of New York University offers a course known as "Manufacturing Industries", in which moving pictures are used. This is an orientation course for the freshman who intends to make business his life's work. The purpose of the course is to acquaint the student with the important manufactories of the United States and to bring out the characteristics of the various industries. The course is designed to give the student a desirable cultural background; it clearly pictures the sociological surroundings of the industrial worker and greatly broadens the student's viewpoint, thus making it possible for him to appreciate more fully the significance of many important articles appearing in the daily newspapers and elsewhere.

The class meets for two one-hour periods during the week. Three one-thousand-foot reels are projected; the running time is approximately forty minutes. While the operator is changing the reel, a discussion concerning the previous picture or the text material is carried on. In some instances a representative from the industrial plant shown in the film personally explains the raw material used, the processes, methods, machinery, and the problems in management and marketing peculiar to that particular industry. A remarkable amount of information on a scientific subject can be acquired by a student in a relatively short period of time.

Over a period of about five years the Department of Management, under the guidance of Professor W. B. Cornell, has carried on extensive experimental work in the use of motion pictures as a means of presenting subject matter in business administration. It seems essential that a student graduating from a school of commerce should have a knowledge of what goes on inside a large manufacturing plant. This knowledge cannot be gained by means of reading books, and there is not sufficient time for extensive plant visitation. The motion picture is the only means of bringing the factory and factory operation into the classroom.

The writer was given the task of developing a course that would give the student of business during his first year of college work a bird's-eye-view of industry as a whole. It is believed that such a course would help the student to make up his mind concerning the field of business which he is interested in, and perhaps best fitted for, and thus put him in a better position to specialize in a particular phase of business activities during the remaining years of his college work.

As a result of experimentation with visual instruction methods, a full-point course appeared in the curriculum of the School of Commerce of New York University last September. About seventy students registered the first term and over one hundred the second term.

The course consists of a well-rounded schedule of motion pictures, starting with the agricultural development of the United States and closing with the latest discoveries in the field of aviation. Dr. F. W. Wile's book, "A Century of Industrial Progress", is used as a textbook. A chapter is assigned each week. The motion pictures are carefully chosen to supplement the book material. This combination affords the students an unexcelled opportunity to appreciate the development of industry and the methods of manufacturing on our

present day scale of mass production in the particular line of business activity shown in the motion picture projected during the class session. The majority of large concerns are very willing to lend their reels of films to educational institutions without charge.

The schedule of *text book assignments* and *motion pictures* covering the year's work follows:

A SURVEY OF BUSINESS
Management 15 and 16

October 1 and 3 *Chapter I "Agriculture"*
- A Trip Through the International Harvester Company's Tractor Works
- Motorizing the Farm
- Mechanical Cultivation of Virgin Soil
- Business Management Applied to the Farm

October 8 and 10 *Chapter II "The Lumber Industry"*
- The Forest and Wealth
- The Forest and Water
- Telephone Poles as a Part of Commerce
- Preparing Telephone Poles
- Commercial Cedar
- Lumbering in British Columbia

October 15 and 17 *Chapter IV "Foreign Trade"*
- Carrying American Products to Foreign Lands
- Laying the High Speed Ocean Cable
- Inspecting Foreign Food Products
- Inspecting Foreign Plants
- Pipes and Cigarettes in the Making

October 22 and 24 *Chapter V "Mining"*
- Ford Way of Coal Mining
- Anthracite
- Bituminous
- Salt Mining
- Twelve Points of Safety in the Mine
- The Wonders of Anthracite

October 29 and 31 *Chapter VI "The Copper Industry"*
- The Story of Anaconda Copper
- Oxygen Breathing Apparatus

November 7 *Chapter VI "Lead"*
- The Manufacture of Paint

November 12 and 14 *Chapter VII "The Metal Cutting Industry"*
- Speeding Production with Carboloy
- Grinding as a Part of Industry
- Cutting to the 1/20,000 Part of an Inch
- Use and Abuse of Twist Drills

November 19 and 21 *Chapter VII "Power"*
- Water Power
- Steam and Electricity
- Power Transmission
- From Coal to Electricity

November 26 *Chapter III "Manufacture in Special Fields"*
- Manufacture of Standard Plumbing Equipment
- Manufacture of Canned Milk
- Manufacture of Stetson Hats
- Manufacture of Hosiery

December 3 and 5 *Chapter VI "The Steel Industry"*
- Making Steel
- Making Seamless Steel Tubing
- Steel Ties

December 10 and 12 *Chapter VIII "Cotton Industry"*
- Selecting the Cotton Seeds
- The Manufacture of Cotton
- The Textile Manufacturing Plant

December 17 and 19 *Chapter IX "Paper and Rope Industries"*
- Manufacture of Paper
- Another Use for Paper
- The Manufacture of Rope
- Oxygen and Its Uses

January 2 *Chapter III "Manufacture of Meters"*
- Manufacturing the Electric Meter

January 7 and 9 *Chapter X "Printing Industry"*
- Making the "New York Times"
- Making a Book
- The Historic Development of Books

January 14 and 16 *Chapter XII "Railroads"*
- Manufacturing a Locomotive
- The Electric Locomotive
- Freight Car Distribution
- Transportation

February 6 *Chapter XXIX "Radio"*
- Manufacture of the Vacuum Tube
- Manufacture of the Alkaline Storage Battery

February 11 and 13 *Chapter XIII "Banking in the United States"*
- History of the New York Stock Exchange
- The Federal Reserve System
- Making a Bank Note
- Modern Banking

February 18 and 20 *Chapter XV "The Petroleum Industry"*
- Petroleum and Its By-products

February 25 and 27 *Chapter XVI "Research, Science and Invention"*
- The Life of Thomas A. Edison
- Electric Heat in Industry

March 4 and 6 *Chapter XVII "Chemical Industry"*
- The Story of Dynamite

March 11 and 13 *Chapter XVIII "Department Store Merchandising"*
- Retail Management
- Manufacture of Rayon Silk
- Manufacture of Flour
- Manufacture of a Pencil

March 18 and 20 *Chapter XVIII "The Rubber Industry"*
- The Manufacture of Rubber
- Manufacture of Linoleum

March 25 and 27 *Chapter XIX "Meat Packing Industry"*
- Inspecting Animals
- Inspecting Meats
- Preparing Animals for Meat
- Sorting Cattle
- Manufacture of Leather (Chapter XII)

April 1 and 3 *Chapter XX "Building Construction"*
- The Manufacture of Alpha Cement
- The Construction of the Western Electric Company's Plant
- The Manufacture of Sulphur

April 8 and 10 *Chapter XXI "Labor and America's Century of Industry"*
- Waste Elimination in Industry
- Accident Prevention in U. S. Steel Plant

April 15 *Chapter XXII "The Electric Industry"*
- Making Gray Iron Castings
- Making Mazda Lamps
- Making the Largest Power Transformer
- Automatic Arc Welding

April 22 and 24 *Chapter XXIII "Telegraphy and Telephony"*
- The World's Telephone Workshop
- Manufacturing a Telephone
- Mass Production in Telephone Manufacture
- Making a Lead Covered Cable
- Planning Telephone Production

April 29 and May 1 *Chapter XXVI "The Automotive Industry"*
- Manufacturing a Spark Plug
- On the Proving Ground, General Motors
- Manufacturing of the Willys-Overland

May 6 and 8 *Chapter XXVII "Motion Pictures"*
- Making the Motion Picture Film
- Motion Picture Industry
- Men and Management

May 13 and 15 *Chapter XXVIII "Aviation"*
- Construction of the Aeroplane
- The Aeroplane—Its Place in Commerce

An examination of this schedule will show that approximately fifteen years of experience are summed up in about thirty weeks.

NEWS AND NOTES

CONDUCTED BY THE STAFF

A Showing of Surgical Talkies

The first talking picture film to be used by the College of Physicians and Surgeons of Columbia University in surgical and medicinal lectures was shown privately by Dr. Clay Ray Murray, Assistant Professor of Surgery, in a projection room at 729 Seventh Avenue.

The film depicts the reduction and splinting of a Pott's fracture, a fracture of the lower fibula with an outward, backward displacement of the foot. The process of pulling, straightening and splinting is shown while the physician's voice is heard explaining the diagnosis and the procedure.

A series of films, including such subjects as delivery, treatment of nervous diseases and instruction of nurses, will be prepared for exhibition at the college beginning next September.

The medical schools of Johns Hopkins, the University of Pennsylvania, the University of Michigan and Ohio State are among those which are expected to make and exchange films. The Medical Centre will have a talking picture projection apparatus within ten days for the exhibition there of such films, it was said.

New Film Strip on Safety

The National Safety Council has just completed a film strip on home safety, consisting of 18 pictures and 9 explanatory slides. The strip, together with the mimeographed outline accompanying it, forms a complete illustrated lecture on hazards in the modern American home. Since special emphasis is placed on practices that cause falls, and since persons more than 55 years old are the more frequent victims, the strip is especially for adult audiences.

The strips may be borrowed with the lecture at no charge by responsible persons and organizations. The demand, however, makes it imperative that they be not held longer than one week without advance understanding to that effect.

A New Discovery in Photography

The discovery recently made at Cornell University that pictures can be taken directly on cold, hard, untreated metal without the usual medium of sensitized plate opens a new field for experimentation with electrons and arouses a world of speculation. Dr. P. H. Carr, a graduate student working under the direction of Dr. F. K. Richtmyer, professor of physics, made the discovery one day while looking at the rough spots produced on the metal target of an X-ray tube by electron bombardment. Such spots are commonplace, familiar sights to laboratory workers.

It occurred to Dr. Carr, says the *Christian Science Monitor*, that perhaps long before the electrons produced the rough place they made an invisible impression, which might be "developed" in the same manner that the still invisible image on a photo is brought out by putting it into a developing bath. From then on the story is short, but the work took several years. Dr. Carr shot the electron rays at gold plates and developed them with mercury vapor, at silver and developed with iodine, used hydrochloric acid to develop zinc plates and iodine to develop copper.

In each case he brought out on the metal surfaces the previously invisible mark made by the electron "shot." These marks were vertical lines, the places where the electron streams struck; very slim lines for high powered beams and broader lines for low voltages. Investigations are in progress to study the peculiarities of this phenomenon and to develop a theory of its action. Dr. Richtmyer says he is confident the metal plates or films may in future be used to record these electron beams the same as do photographic films, and in some cases with greater advantage to experiment, because the metal parts record in broad daylight as readily as in darkness. Thus danger of spoiling by light is averted.

The Ten Best Films

The ten best pictures of 1929, chosen through the *Film Daily's* poll of editors and critics are: *Disraeli, Broadway Melody, Madame X, Rio Rita, Gold Diggers of Broadway, Bull Dog Drummond, In Old Arizona, The Cock-Eyed World, The Last of Mrs. Cheyney* and *Hallelujah.*

It is claimed that this annual poll was the most extensive in scope of any previously conducted by the *Film Daily.*

George Eastman Honored

George Eastman was awarded the medal of the American Institute of Chemists in recognition of being one of the greatest lay-scientists of the present day. Approval in 1918 of the establishment by the research laboratory of a department of synthetic organic chemistry to manufacture and supply various synthetic organic chemicals required for research purposes in the U. S. was his most noteworthy service to American chemistry, it was pointed out.

Society of Motion Picture Engineers to Meet

The spring meeting of the Society for Motion Picture Engineers is scheduled for May 5-8 at the Wardman Park Hotel, Washington. Many of the papers will con-

cern sound pictures and it is expected that the society's committee on standards will submit for approval its report fixing wide-film standards.

A New York Section of the Society was formed at a recent meeting of more then 150 Eastern members. The geographical boundaries of the New York Section were defined by the Board of Governors as an area enclosed within a circle having a radius of 50 miles from Times Square. With the formation of the New York Section, it will be possible for the Eastern Members to become better acquainted with each other and the work of the society.

Motion Pictures at Chicago World Fair

Development of the motion picture industry in display form is being considered as one of the forthcoming attractions at the Chicago World Fair to be held in 1933, to be headed under "A Century of Progress." The display will include every step in the various processes from manufacture of film to the projection of finished product.

An outstanding feature in the exhibit dramatizing the march of science will be talking pictures interpreting Einstein's theory of relativity.

Motion Pictures for Shut-Ins

More than a billion feet of film will be supplied gratis by the motion picture industry during 1930 for the entertainment of 500,000 shut-ins in institutions such as orphanages, hospitals, homes for the aged, sanitariums and penal institutions, who cannot visit the motion picture theatres.

Some of the footage available will go to entertainments under the auspices of charitable organizations cooperating with theatre owners during the holidays and at different intervals throughout the year.

Foreign Notes

Germany

The "Film Seminary" in Europe was opened in Berlin this year. It constitutes a regular training college for school teachers, chosen from various educational establishments by the central board, for instruction not only in the science of handling the apparatus for projecting the picture on the screen, but in the art of making pictures suitable for the classroom.

It is understood that the art of teaching by means of motion pictures taken by men who would formerly have written text books is being adopted by the German authorities as a normal part of the educational system and will, within a short space of time, be regarded by children as a natural feature of school life.

The deputies of the City of Dresden (Germany) decided to introduce film exhibition in schools as tuition means. Projectors of various systems will be installed for test in the popular and high schools.

Bulgaria

The Bulgarian Parliament has just passed a law providing for the strict control of moving pictures as a part of the movement to curb rapid progress. Most of the country's leaders feel that Bulgaria's sudden plunge into modernism was responsible for the spread of anarchism, communism and radicalism a few years ago in the country.

The State has undertaken the showing of pictures with educational value to the peasants.

During the last year the Ministry of Education has shown films to 532,000 people living in 567 villages. This is only the beginning of this activity and it is believed that in conjunction with co-operative societies, country farm agents, teachers, priests and the army, the state moving pictures may become a strong factor in inducing hard-headed villagers to try and better their methods of work and better their ways of living.

Greece

Greece is now introducing educational films in its schools. An organization is already in existence for the forwarding of the use of films as an instrument of education. Screenings are organized by this body on Sunday mornings in Athens, and children are invited to attend. The Government has now decided not only to support this organization, but also to make the use of educational films compulsory in schools. A commission of competent officials presided by Mr. Veniselos, was recently instituted. It was decided to support by all possible means the use of educational films. Different projectors were examined by the Ministry of Public Instruction and one particular model is to be approved and its use made general.

Sweden

The exhibition of school films in Sweden is making great progress. In the larger cities a motion picture theater is rented by all the schools in the community and films relating to different subjects are shown. In some rural districts of Sweden as many as 20 schools cooperate in this school film exhibition, thus making these performances possible, because, as a rule, no fee is charged and the expenses are defrayed by the school authorities.

All school films are distributed through the Svensk Filmindustri Skolfilm, a subsidiary of Svensk Filmindustri, which is reported to be the largest Swedish film producer in Sweden. The organization controls 104 motion picture theaters and is distributing 1,000 school films every week for exhibition in about 1,500 schools throughout Sweden.

AMONG THE MAGAZINES AND BOOKS

CONDUCTED BY MARION F. LANPHIER

The Parents' Magazine (February) "The Crisis in the Movies", by Walter B. Pitkin, sounds over again the old challenge and assertion that the public must be educated to better pictures before the movies can be made safe for children and reliable for adults.

Revolution is sweeping through the movies. It began with the talkies. It may not end until the entire structure, policy and personnel of Old Hollywood have vanished. When may this occur? It all depends on the parents of America.

You want your children to see interesting, wholesome pictures. You find that perhaps 95 out of every 100 pictures are stupid or dull or perverted or, at best, designed for adult appreciation. The other five are so delightful that you realize the possibilities of the movies as an artistic and educational influence.

In spite of the defects of the 95, your children persist in seeing them. They respond to the speed and thrills of the incidental action, even when the main story goes over their heads. You wonder what you can do about it.

This calls for new producers who have never learned the ways of the old movies. (Or, if they have learned them, they must have failed to satisfy the big companies.) The pictures of the new era must be made apart from the existing Hollywood studios and managers. They must be shown in neighborhood theaters which are free from the control of Hollywood.

Turn a deaf ear to the propagandist who advises you to help Hollywood make "bigger and better pictures." That won't work! Educate a new public to prefer better films. It will take time and money, but will be worth the while.

In this same issue we find a most interesting symposium on "Shall Children Go to the Movies". The opinions of experts in the field of child welfare, in that of child psychology, and in the most important one of the child's court, are presented. Answers vary from the characteristicly cynical realism of John B. Watson and the more composed, but no less accurate affirmative answer of Lee F. Hanmer, director of the recreation department of the Russell Sage Foundation, to a greater number of negative replies. Space does not permit of quotation here, but we recommend this symposium to every thinking parent and teacher. It will be noted that the majority of opinion accepts the age of ten as the logical limit below which children had better not attend theatrical movies—the age limit adopted by the "Film Estimates" some four years ago.

The Churchman (February 1) "The Futile Exhibitor", by William Marston Seabury, is, as its subtitle indicates, an account of "How the Industry Shackles Your Local Movie Manager". Coming from the former General Counsel for the Motion Picture Board of Trade and the National Association of the Motion Picture Industry, this article carries more than ordinary weight.

The question is frequently asked, "Why do not the motion picture theatre proprietors use better judgment in the selection of the pictures which are shown to the public?" The answer is quite simple.

The producers not only make the pictures that are exhibited but in conjunction with their own distributing agencies own or otherwise control large numbers of the best theatres in which their own pictures are exhibited. In addition to this the so-called independent exhibitors are completely dominated by the producers who also control large numbers of theatres.

There are said to be from 16,000 to 20,000 motion picture theatres in America. *Upwards of seventy-five per cent of the total revenue resulting from the exploitation of a picture in America, comes from these theatres.* All or almost all of these first-run theatres are now owned or controlled by the producer-distributor members of the Hays Association.

Mr. Seabury then gives a detailed account of the legal fight and its present deadlock and general futility. The article is a brief but very meaty review for any reader who wishes to become quickly cognizant of the situation to date.

In this same issue "Mr. Hays and Cooperating Groups", by Catheryne Cooke Gilman, discusses the subtle craft of the Hays organization in using women's clubs and Church people to enhance their vicious campaign.

Groups all over the United States are quietly forming and declaring that the youth of this country shall be released from the results of cooperation of their well-meaning mothers and certain religious leaders with the motion picture industry. It is well known that without this cooperation, motion picture producers would have been forced long ago to make better pictures. It has been this insidious cooperation with the motion picture industry on the part of women's clubs and religious organizations that has supported "children's matinees," "family nights," "selection not censorship," "constructive cooperation," and the deceptive policy of "promote the best and ignore the rest." These jingoisms, known as "slogans" and "formulae," have been responsible for delaying legislation to restrain the industry from producing and distributing undesirable pictures.

Not long ago the editor of this department sat at a table of serious-minded New Yorkers, discussing this identical situation, and witnessed the whole-hearted and somewhat vehement resistance that a committee from one of the finest experimental schools for children offered to these statements. They were solidly for Mr. Hays and his see-the-best-ignore-the-rest scheme.

The Pied Piper of the Movies has not only enticed our children into the mountain fastnesses and employed a "woman ambassador" to take charge of the pass, but has subjected the whole nation to the censure of all civilized countries. It is time that action be instigated to bring to an end speedily the misrepresentation of the life of the American people at home and abroad.

Slogans, politicians, denominational cloaks or brilliant ladies are equally objectionable. The issue is clear-cut and the responsibility rests upon the home, the school and the church. Are you, as a member of these institutions, cooperating with the industry to exploit youth and menace the good will and peace of the world, or are you cooperating with your government in bringing about the appointment of a Federal Motion Picture Commission to regulate and supervise public utility entering its product in interstate and international commerce?

The Vocational Guidance Magazine (March) "Employment Problem of Motion Picture Industry", by Marian L. Mel, discusses the extra situation in the film business. An interesting article about the problems of a neglected group of individuals!

International Review of Educational Cinematography (January, February) Again this department must take space to laud this inspiring publication, now out in a new dress! The improved format is most effective as to size, paper, type, set-up and cover design. We cannot take the space to list the tables of contents. Suffice it to say, as we have heretofore declared, there is no smallest paragraph in this international publication but stimulates, in striking manner, the serious reader. One is in touch with the varied aspects of the cinema from every corner of the occident and orient. One longs for adequate superlatives and then realizes that the publication deserves that highest of tribute,—a simple statement of its excellence and integrity without rhetorical adornment.

BOOK REVIEWS

THE PAGEANT OF AMERICA, Volumes 2, 14 and 15. The Yale University Press, New Haven, Conn., 1929.

There have appeared the final volumes of the magnificent fifteen-volume series of *The Pageant of America*, which as a whole is not only the product of the most painstaking, extensive and exhaustive research in the sources of pictorial material touching all phases of American history and national development, but also, from the very nature of the volumes, one of the most difficult projects achieved in the annals of American publishing. As a technical accomplishment the series is noteworthy, as a pictorial history of America it is a colossal work, entirely unique among historical publications to date.

THE EDUCATIONAL SCREEN has made detailed reference to the previously issued volumes in the series, in its issues of January and December 1927, May 1928, and January 1929.

The last three volumes follow the same general plan as the foregoing —each is introduced by a foreword from the pen of the editor of the series, Ralph Henry Gabriel; each includes from 600 to 1000 pictures with accompanying text, and each contains a supplementary section of "Notes on the Pictures," as well as an index. Volume 15 includes as well a General Bibliography for each of the volumes in the series, and a Topical Guide to assist the reader in locating more readily the particular volume which contains the material for which he is searching.

The three final volumes to come from the press are individually summarized below:

Volume 2—"The Lure of the Frontier," by Ralph Henry Gabriel. 327 pages with 598 illustrations.

Here is told the story of the advancing tide of settlement, not in terms of territories or treaties or political questions, but in human daring, human sacrifice and human suffering. Its editor says, of the

Vol. 2. The Lure of the Frontier
The Pioneer Woman, from a statue by Hermon A. McNeil (1866-), courtesy of the Reinhardt Galleries, New York.

scope of the volume, "Within the pages at hand an effort has been made to chronicle only the work of exploration which preceded the advance of civilization—the activities of the fur trader, the westward progress of the fringe of settlement, and the long, sad story of race conflict."

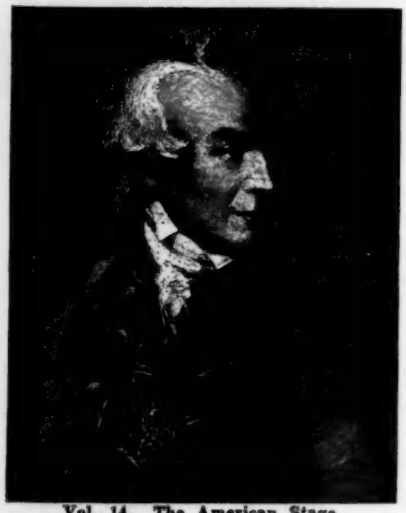
Frontier life is pictured as it existed in successive stages through tidewater, to the Piedmont, in the country of the Iroquois, through the Great Lakes region, in the Great Plains and the mountain wilderness, in Texas and California, and still more recently, the frontier of Alaska. In each instance the volume tells in picture form, that "story of race conflict" which everywhere has marked the struggles of pioneering forces.

There is an intimate human quality to the volume which enlivens many a character and many an incident in this stirring aspect of American history and gives them a permanence they have lacked in the cursory treatment of the average historian heretofore. For the student of history, this volume is quite apt to be among the most popular of the series—there is action aplenty for the youngest reader and a stirring quality about the narrative which will not fail to attract the more mature.

Volume 14 — "The American Stage," by Oral Sumner Coad and Edwin Mims, Jr. 362 pages, 1027 illustrations.

The authors have obviously been interested not alone in the theatre itself, but the theatre as it has reflected the changing temper of life through the various stages of America's development, and as it has in turn been influenced by the forces of history since early colonial times.

The volume is profuse in its pictorial material—in the face of



Vol. 14. The American Stage
Joseph Jefferson, I, 1774-1832, from an engraving by D. Edwin after the portrait of John Neagle, in the New York Public Library.

what must have been difficulties in assembling a variety of such material dealing with matters of acting and stagecraft, famous figures and notable structures in theatrical history, a subject matter somewhat more limited in range, it would seem, than that covered by some of the other volumes of the series. The book is history to the minute—as current as today's playbills in its final chapters. The student of the theatre will delight in its treatment of famous personages of the stage of the present day and no less in the picture it gives of early theatrical history and its no less well-known characters.

It is significant of the completeness with which the authors of *The Pageant of America* have treated their subject, that not only is the material progress of America chronicled, but her intellectual and cultural development as well. The first volume of the series takes its logical place in a well-rounded picture of national life.

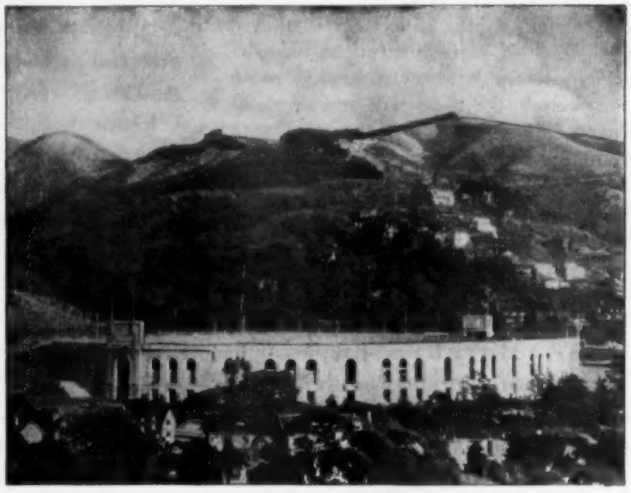
Volume 15—"Annals of American Sport," by John Allen Krout. 360 pages, with 747 illustrations.

Dedicated to Walter Camp, "whose faith and vision find fulfillment in these annals," the volume is a fitting addition to the series as a whole. Sport has made its significant contribution to American life, and its development, during the past half-century particularly, is an outcome of our increasingly complicated industrialism and the growth of city life.

American sport, as revealed by the volume, reflects the forces at work in the new nation. To the pioneer his play was his work—his fishing, hunting and trapping were bound up in his every-day struggle for existence—and organized recreation as such was entirely unknown to him. From those early days to this, lies a most interesting transition which will be followed with equal ardor by the schoolboy sports enthusiast and the mature student of social life and social forces.

Sport takes its place along with other factors in national life and so, along with other forces which have shaped our national character, deserves consideration in a complete pictorial history of America. As the editor states it in his introduction: "Sport unquestionably aids the American people to conserve the ideal and carry on the practice of democracy. If industrialism warped democracy, it confined individualism within vast and intricate organizations. It harnassed men and women to automatic machines. On the playground and the athletic field the individualism of frontier America lives again as the narrow specialist of the industrial world finds new opportunities to develop his powers and express his personality. The evidence suggests that only a beginning has been made. In Amer-

(*Concluded on page* 122)



Vol. 15. Annals of American Sport
Stadium at the University of California, from a photograph by George Stone, from Ewing Galloway, New York.

THE THEATRICAL FIELD

CONDUCTED BY MARGUERITE ORNDORFF

Theatrical Film Reviews for April

[276] *BURNING UP* (Paramount)

Speed and thrills in the good old Wallie Reid style are offered you in Richard Arlen's first starring picture. He and Tully Marshall, Sam Hardy, and Francis McDonald are as engaging a bunch of crooks as ever swindled a small town banker. The banker, played by Charles Sellon, has a daughter—they always have—and that daughter is none other than Mary Brian. When Richard and his racing car come to town to inveigle the banker into betting twenty-five thousand dollars on a fixed race—well, he just naturally changes his mind when he sees Mary. Amusing and peppy.

(*See Film Estimates for March*)

[277] *SEVEN KEYS TO BALDPATE* (R. K. O.)

Richard Dix puts life into this somewhat ancient thriller, with capable assistance by Miriam Seegar, Margaret Livingston, Dewitt Jennings, Lucien Littlefield, and others. Surely everyone knows the story of the writer who wagers that he can go to a deserted inn at midnight in the dead of winter, and turn out a ten-thousand-word story by midnight of the next day. But even if everyone does know it, nobody is going to be bored by Mr. Dix's sprightly presentation of it.

(*See Film Estimates for February*)

[278] *SEVEN DAYS' LEAVE* (Paramount)

One of the year's gems from every standpoint, unless, of course, you consider Barrie too sentimental for your taste. Barrie wrote into *The Old Lady Shows Her Medals* a little old London charwoman who longed to do her bit in the war but didn't know how. In order to maintain her standing among her associates with sons at the front, she chose a name at random from the newspapers, invented a soldier son to fit it, and wrote herself letters purporting to come from him. Unexpectedly the soldier turned up on London leave, sick of the war and ready to desert, but his brief contact with the game little scrubwoman changed his mind and sent him back to the trenches to die. Diminutive Beryl Mercer is the center of the picture as Mrs. Dowie, and Gary Cooper tops her by a foot and a half at least, as the disgruntled Highlander. Miss Mercer's performance is a thing worth remembering, and Mr. Cooper's is unusually fine, despite his handicap in playing opposite such skill and experience.

(*See Film Estimates for February*)

[279] *DEVIL-MAY-CARE* (Metro-Goldwyn-Mayer)

Ramon Novarro sings and chuckles his way through a romantic affair, as a staunch Bonapartist, pursued by the King's men, masquerading as a servant in the house of a royalist friend, and employing most of his time in singing love songs to a fair guest. *The Shepherd's Serenade* and *How Can You Be So Charming* are the melodies most likely to linger in your memory after the picture is forgotten. Dorothy Jordan is petite as the heroine, but not outstanding as to voice. Marion Harris, recruited, I believe, from vaudeville, sings the supposedly Napoleonic ditties in approved 1930 "blues" fashion. It's a not altogether believable combination.

(*See Film Estimates for March*)

[280] *DISRAELI* (Warner Brothers)

George Arliss gives a magnificent performance in the play that served him so long and so excellently on the stage. Mr. Arliss' characterization of the brilliant prime minister is subtle, suave, edged with a biting humor, tempered with a whimsical sweetness, and mellowed by years of playing it always with his utmost skill. The story deals with Disraeli's fight to secure England's world position by obtaining control of the Suez canal, his encounter with a clever woman spy, and his efforts as a matchmaker in behalf of a young man in his employ. His own tender love story runs through the background of the play, Mrs. Arliss playing Lady Beaconsfield with beautiful delicacy. Joan Bennett, Lane Chandler, and David Torrence are splendid in the supporting cast. By no means overlook this.

(*See Film Estimates for December*)

[281] *THE SHIP FROM SHANGHAI* (Metro-Goldwyn-Mayer)

A rip-roaring melodrama in which five very smart and very superficial people are brought up against reality with a bump when the crew of their sailing vessel mutinies under the leadership of an insane steward. The idea, I suppose, is to show how each of the five meets the situation. So far as I can see, none of them meets it; they just drift along with it, hoping something will turn up. Louis Wolheim as the madman is given the doubtful benefit of innumerable

THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Titles of Films (Actors) (Producers)	For Intelligent Adults	For Youth (15 to 20)	For Children (under 15)
Climax, The (Jean Hersholt) (Universal) Pleasing and wholesome romantic comedy in Italian setting, of simple people with artistic aspirations.	Entertaining	Wholesome	Little interest
Cohens and Kellys in Scotland (Sidney-Murray) (Universal) The annual installment of the Hebrew-Irish partners and their wives, same cast, same gags and some new ones, with a story somewhat more wholesome and less vulgar than usual. Very funny, for those who like that kind.	Hardly	Amusing	Amusing
Dark Streets (Jack Mulhall) (First Nat'l) Ordinary gangland thriller, with dual role for Mulhall as policeman-crook hero.	Mediocre	Doubtful	No
Fighting Legion, The (Ken Maynard) (Universal) Usual western gunpowder-heroics, with the horse, Tarzan, featured. The murderer of an officer of the law is finally captured. Mostly free from objectionable elements.	Hardly	Exciting	Exciting
Framed (Evelyn Brent) (RKO) Racketeer-night-life-in-big-city melodrama above average, with some notable bits of acting.	Good of its kind	Doubtful	No
Furies, The (Lois Wilson and H. B. Warner) (First Nat'l) Murder-mystery triangle, full of suspense and notably well-acted. Gripping plot is really out of the ordinary, but strains credulity in spots.	Rather good	Gripping	Hardly
Girl in the Glass Cage, The (Loretta Young) (First Nat'l) Sordid, unhealthy story of small town life and the city-underworld, with plenty of sex element.	No	No	No
Girl Said No, The (William Haines) (M-G-M) Usual Haines story, largely silly and impossible, exploiting brazen conceit and roudy conduct as something clever and funny. Parents will hardly wish their children to follow his pattern of offensive modern youth—breaking every law of safety, convention, good manners and good citizenship.	Hardly	Not advised	No
Golden Calf, The (Sue Carol) (Fox) Cheap, preposterous farce-comedy, largely silly, contrived to make "legs" the centre of attraction. Stupid rather than harmful and poorly acted by Sue Carol.	Cheap	Better not	No
Green Goddess, The (George Arliss) (Warner) Grim situation of three British subjects in the power of a hostile merciless Rajah in the Himalayas. Made gripping and tense by the masterful acting of Arliss and an able cast.	Interesting	Good unless too mature	Too mature
Happy Days (All Star) (Fox) Elaborate, picturesque, lively, noisy story of a showboat stranded on the Mississippi. Financial situation saved by former members of the troop who have now become famous. (See Review No. 283)	Rather novel	Entertaining	Harmless and probably amusing
Hello Sister (Olive Borden) (Sono Art) Improbable and convincing story of a jazz-mad girl who tried to reform for six months to win an inheritance. Unobjectionable but poorly acted and unimpressive.	Mediocre	Passable	No interest
Her Unborn Child (English cast) (Windsor Pictures) A serious and dignified picturising of the problem of the unwed mother—propaganda against birth control and abortion. Uneven in quality but delicately done and notably acted especially by the mother and the doctor.	Rather good	Doubtful	No
High Treason (Benita Hume) (Tiffany) Unusual, elaborate fantasy of 1940, done with dignity and real power, strongly anti-war in intention and effect. Some over-complexity of plot, but interesting for imaginary developments of the future such as television. Strong, convincing, wholesome and unobjectionable.	Interesting	Interesting	Thrilling but beyond them
Honey (Nancy Carroll) (Paramount) Much movie-ized version of the charming stage play "Come Out of the Kitchen," marred by some interpolations but made thoroughly entertaining by the actors, especially Nancy Carroll.	Amusing	Very good	Good
Lord Byron of Broadway (Charles Kaley) (M-G-M) Another rather cheap backstage story, with a tin-pan alley song writer as hero. Little to redeem it from mediocrity save a few tunes. Kaley shows little ability or personality.	Mediocre	Better not	No
Lummox (Winifred Westover) (U. A.) Realistic story of the hard life and disappointments of a humble servant girl, notably played by Winifred Westover. A worthwhile study in character and self-sacrifice.	Interesting	Doubtful	Beyond them
Melody Man, The (William Collier, Jr.) (Columbia) Very human nnd appealing character-story of a Viennese musician, contrasting classical and jazz music.	Rather good	Fair	Beyond them
Men Without Women (Kenneth MacKenna) (Fox) Grim and gripping story of men facing death in sunken submarine. True heroism without mawkishness. Opening cabaret scenes somewhat objectionable but quite obliterated by effect of film as a whole.	Unusual and interesting	Strong and interesting	Good but very strong
Montana Moon (Joan Crawford) (M-G-M) Thrilling out-of-doors story with beautiful western settings, of spoiled daughter of Eastern financier—but it is made chiefly a vehicle for exploitation of Joan Crawford's two specialties, sex-appeal and jazzy conduct. Shows parents as helpless in the hands of their children. John Mack Brown is painfully ineffective as the western diamond in the rough.	Perhaps	Decidedly not	No

Titles of Films (Actors) (Producers)	For Intelligent Adults	For Youth (15 to 20)	For Children (under 15)
Mounted Stranger, The (Hoot Gibson) (Universal) More western warfare between hero and villain—the sort that children will enjoy as long as it is fed to them.	No	Fair	Not recommended
Murder on the Roof, The (Raymond Hatton) (Columbia) Excellent "murder thriller," well played and directed, but with unwholesome central situation of cabaret dancer "kept" by the night club owner, though no offensive scenes are shown. Plenty of booze and wild night life.	Good of its kind	Unsuitable	No
Only the Brave (Gary Cooper) (Paramount) Thoroughly charming picture of Civil War days, well-acted, beautifully photographed, and with romance and convincing heroics nicely blended.	Enjoyable	Excellent	Very good
On the Border (Rin Tin Tin) (Warner) Lively melodrama, with villain smuggling Chinamen over Mexican border, with Rin Tin Tin a major factor in the solution. Rather ordinary of its kind.	Mediocre	Perhaps	No
Rich People (Constance Bennett) (Pathe) Ordinary comedy-drama where the heroine nearly marries the rich fiance' and has a hard time convincing the poor but worthy young rival that she really loves him, etc. etc.	Mediocre	Hardly	Hardly
Roadhouse Nights (Helen Morgan) (Paramount) Above average underworld story in which the gang leader is finally out-smarted by the newspaper reporter. Fast, tense, plenty of suspense, and exceptionally well acted.	Fair	Perhaps	No
Rogue Song, The (Lawrence Tibbett) (M-G-M) Perhaps the best film of its kind yet produced (from Franz Lehar's opera, "Gypsy Love") made notable by Tibbett's singing. The music is of high quality, the color-photography excellent, and the story and action are distinctly entertaining throughout.	Excellent	Very good	Probably too mature
Sally (Marilyn Miller) (First Nat'l) Complete musical comedy, a la Ziegfeld, gorgeous in color and settings, sometimes garish, with a little thread of a story that is incessantly clogged with elaborate ballets, songs and dances. Many laughs, some of them cheap, but with fine work by Marilyn Miller. One of the best productions of its kind to date.	Fine of its kind	Entertaining	Good
Sarah and Son (Ruth Chatterton) (Paramount) A splendid picture of mother-love, finely acted by Ruth Chatterton and Frederick March. The mother's suffering and struggle to get back her child, after poverty had forced her to give it into the keeping of others, is genuine and convincing. The dialog is a joy to the ear.	Notable	Good and probably interesting	Little interest
Ship from Shanghai, The (Conrad Nagel) (M-G-M) Five English people becalmed on ocean, supplies running low, at the mercy of an armed lunatic with bestial intentions who has seized control of the ship and crew. Harrowing throughout, with fantastic solution supposed to be psychological.	Not worth seeing	Unsuitable	Too brutal
Sky Hawk, The (John Garrick) (Fox) Notably good picture of war-time (comedy, not melodrama) with the hero saving London from destruction by zeppelins in thrilling and convincing style. Fine love-story and character interest prevents any effect of glorifying war.	Very good of its kind	Thrilling and good	Good unless too exciting
Slightly Scarlet (Evelyn Brent) (Paramount) A crook story rather above average, with unusually good dialogue. Clive Brook is now used as one of the crooks.	Good of its kind	Doubtful	No
They Learned About Women (Van-Schenck) (M-G-M) A baseball-vaudeville hash, devised as an excellent vehicle for Van and Schenck. Full of songs and many laughs—with vulgarities more or less in evidence.	Hardly	Doubtful	No
Undertow (Mary Nolan) (Universal) The lighthousekeeper's wife was lonely, found temptation and regrets, etc.	Mediocre	No	No
Village of Sin, The (Russian cast) (Amkino) A realistic, grim story of Russian peasant life in war-time meaning to show the changing morality of Russia. A father seduces his son's wife while son is away at war. Some very striking photography and camera effects. (Silent).	Interesting	By no means	No
Wedding Rings (Lois Wilson, H. B. Warner) (First Nat'l) Triangle-drama decidedly above average, notable for fine work of H. B. Warner and Lois Wilson. The dramatic conflict is between the admirable sister who loves the man, and the younger who tricks him into marriage for his money. Unconventional situations and conduct make it thoroughly unwholesome for youth. Olive Borden is not equal to her role of the cheap and contemptible younger sister.	Interesting	Unwholesome	No
Wide Open (E. E. Horton) (Warner) Thoroughly implausible farce, with some utterly absurd elements, but quite laughable. Horton and Patsy Ruth Miller do all that could be done with the story.	Hardly	Fairly amusing	Fair

BEST RECENT FILMS FOR THE FAMILY

* The Aviator	Let's Go Places
Burning Up	* Little Johnny Jones
Devil May Care	Lone Star Ranger
Footlights and Fools	Not So Dumb
The Great Gabbo	Married in Hollywood
* Half Way to Heaven	* Nix on Dames
* His First Command	Seven Days Leave
Hit the Deck	Seven Keys to Baldpate
* Hunting Tigers in India	Shannons of Broadway
It's a Great Life	The Vagabond King

* Especially good for children

NOTE— The Film Estimates omit the notations, "talking" and "silent," unless required in particular cases. Practically all films are available in both versions and the "sound" version will generally be shown wherever the theatre equipment permits.

close-ups. Casualties include Conrad Nagel, who sustains a bullet wound in the arm and a broken head. Kay Johnson, Carmel Meyers, Zeffie Tilbury, and Holmes Herbert are the other players.

(*See Film Estimates in this issue*)

[282] *DANGEROUS PARADISE* (Paramount)

This is the one about the retiring fellow who lives alone in a south sea island paradise nursing a broken heart and a consequent hatred of women. His solitude is invaded by a helpless girl who has been pursued by men until she loathes them all. Get these two together, and guess what happens. You're right the first time. Richard Arlen, not overly convincing as the woman-hater, and Nancy Carroll ditto as the man-hater, are the central figures, with Gustav von Seyfertitz, Lionel Belmore, and Francis McDonald among the supporting cast.

(*See Film Estimates for March*)

[283] *HAPPY DAYS* (Fox)

A musical conglomeration based on the troubles of the moneyless proprietor of a river show boat. Some enterprising young members of his troupe send an S. O. S. to all his old friends, and put on a monster benefit performance which features all the Fox stars from Will Rogers down. Not especially interesting.

(*See Film Estimates in this issue*)

[284] *LOVE COMES ALONG* (R. K. O.)

Bebe Daniels sings again and has a Spanish-American romance with a musical sailor in the person of Lloyd Hughes. Neither music nor story comes anywhere near the standard set by *Rio Rita*, and that, naturally, is a disappointment to those who hoped for the best. Montagu Love supplies the villainy with an accent, and Ned Sparks the comedy.

(*See Film Estimates for February*)

[285] *THE STREET OF CHANCE* (Paramount)

In addition to a superb performance by William Powell, who never fails to make his character a real one, this picture has a well-knit story, unusually fine direction, and a good cast. So whether or not you are interested in the ethics of gambling as a profession, you can hardly help appreciating the fine points of this production. Those who keep abreast of the volume of crime in the newspapers may be interested to know that it is based on the famous Rothstein case. Kay Francis, Jean Arthur, and Regis Toomey help to make it well worth while.

(*See Film Estimates for March*)

[286] *GENERAL CRACK* (Warner Brothers)

From George Preedy's novel dealing with Prince Christian Rudolph Adolph Christopher Ketlar, the illegitimate son of the Duke of Kurland. Having no prospects, social or otherwise, Christian adopts the military profession and becomes one of the most famous mercenaries in Europe, known by his initials as General Crack. An ill-considered marriage with a gipsy dancer, the intrigues of his employer Leopold of Bavaria, through whom he loses his bride, his revenge, and his attempt to regain his ancestral duchy of Kurland are the chief incidents of the story. Mr. Preedy charitably allowed his embittered hero to die alone on a battlefield, but the Warners prefer a more banal ending. Mr. Barrymore gains immeasurably in the quality of humanness with the use of his voice, although he bellows lustily and unexpectedly upon occasion, to the amazement of his audiences. He consistently presents his left profile, and there are only a few times when he is anything but the actor on parade. Of the cast Otto Mattieson, Hobart Bosworth, and Lowell Sherman are easily the best. Armida as the gipsy and Marian Nixon as the Archduchess Maria Louise are adequate. The eighteenth century costuming and setting are very beautiful.

(*See Film Estimates for February*)

[287] *THE LOST ZEPPELIN* (Tiffany-Stahl)

Taking advantage of the current interest in exploration by air, this picture features a naval expedition to the south pole in a Zeppelin. It is wrecked among ice peaks in the far south, and all the crew are lost except the commander and one other officer, who are eventually rescued. The other officer happens to be the commander's rival in love, and what might have been a very dramatic scene is precipitated when it is found that the rescuing plane has room for only one passenger besides the pilot, making it necessary for one to be left behind. The air scenes are interesting though not entirely convincing. Conway Tearle, Ricardo Cortez, and Virginia Valli are the principals.

(*See Film Estimates for February*)

Film Archives in the Netherlands

The recently published report of the board of the Dutch Zentral-Filmarvhic (The Netherlands) for 1928, states that the ten-year activity of the organization has been extremely successful. The domestic and foreign film industry showed an ever increasing interest in the film archives, and the number of its members doubled during the past year. The Archives possess 852 films, of which 113 are negatives. An agreement has been concluded with the City of Rotterdam, according to which all valuable films from a cultural point of view are to be given to the care of the Archives. It is a significant fact that old films stored up in the Archives often are required for exhibitions of historical or similar character.

SCHOOL DEPARTMENT

Conducted by DR. F. DEAN MCCLUSKY
Director, Scarborough School, Scarborough-on-Hudson, N. Y.

The National Academy of Visual Instruction Convention

THE tenth annual meeting of the National Academy of Visual Instruction was held in the Japanese room of the Ambassador Hotel at Atlantic City, February 25 and 26. President A. G. Balcom had arranged four sessions; two afternoon program meetings, an evening supper session, and a morning meeting at the Exhibit Hall. The attendance at the meetings was good and interest ran high. I counted over fifty-five at each of the afternoon program sessions and fifty were served at the banquet on Tuesday evening.

A number of factors operated to make this meeting the best and most enthusiastic the Academy has ever held, according to many who were present. In the first place, visual instruction "has been accepted" by educators and superintendents as an important factor in instruction; secondly, through the foresight of President Balcom the meetings were held in a place centrally located with respect to the meetings of the National Education Association's Department of Superintendence which was in session at Atlantic City at the same time; then, announcements concerning the meetings and the Visual Instruction supper were printed in the official program of the Department of Superintendence; and finally, a strong program was offered by the speakers who presented carefully prepared material, the majority talking from written papers which will be abstracted and published in THE EDUCATIONAL SCREEN. Certainly President Balcom, Secretary Dent and the Executive Committee of the Academy are to be congratulated on the excellent progress which has been made in the conduct of the organization.

The officers elected for the coming year are: President, F. Dean McClusky, Director of the Scarborough School, Scarborough-on-Hudson, New York; Vice President, Mrs. Charles Joe Moore, Director Bureau of Visual Instruction, University Extension Division, University of Texas, Austin, Texas; Secretary and Treasurer, Ellsworth C. Dent, Secretary of Visual Instruction, Extension Division, University of Kansas, Lawrence, Kansas; and members of the executive committee, A. G. Balcom, Assistant Superintendent of Schools, Newark, New Jersey, in charge of Visual Instruction; and Charles Roach, Director of Visual Education Department, Los Angeles, California.

Notes on the Convention

The academy went on record as favoring the development of an apparatus for sound films using 16mm. film.

John Hollinger, Director of Visual Instruction in Pittsburgh, reported that every student from the Pittsburgh City Normal School must be able to operate a motion picture machine before graduation.

William M. Davison, Superintendent of Schools, Pittsburgh, Pennsylvania, congratulated the Academy on its progress both as to size and in quality. His stirring address which was given at the banquet meeting was of great inspiration to the members of the Academy. The Academy voted unanimously to have it printed.

William H. Dudley of Chicago, Illinois, emphasized the need of providing a visual instruction service for the rural communities which would save the time lost in transportation and the money spent on postage and express. He advocated that such communities should buy visual materials outright for permanent possession and use.

Professor Daniel C. Knowlton, Fieldson School of Ethical Culture, New York City, emphasized in his talk at the dinner meeting, the point

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that pictures have an honest place in instruction and must if necessary even supplant other instructional materials and devices.

A. W. Abrams, Director Visual Instruction Division, Albany, New York, urged members to insist that superintendents purchase visual materials with school funds rather than funds from candy sales or parent's entertainments. He emphasized the point that if visual instruction is worthwhile then schools should make definite appropriations for it. Visual instruction will demand in this way the respectability which it deserves.

Rupert Peters, Director Division of Visual Instruction, Kansas City, Missouri, reported that in the Kansas City Normal school no girl can graduate until she has had the course in Visual Instruction.

Eugene I. Way, Chief Industrial and Educational Section, Motion Picture Division, Department of Commerce, Washington, D. C. described an extensive survey by the questionnaire method on the use of motion pictures in the schools of the United States which is being conducted by his division.

Clyde Fisher, Curator Visual Instruction, American Museum of Natural History, New York City, told of the tremendous growth of this museum's work in the New York City Schools. The museum has a five story building and a staff of forty persons engaged in educational work. Six trucks are used to transport materials to and from the schools.

The visual instruction exhibits at the Auditorium were well attended and attracted widespread interest from those at the National Education Association Convention. The "educational" sound films which were exhibited caused much comment.

Lawrence R. Winchell, President of the New Jersey Society of Visual Instruction is giving a course on visual education at Rutgers University.

The following is a condensed version of one of the addresses given at the convention. Other addresses will appear in succeeding issues of THE EDUCATIONAL SCREEN, and it is possible that a reprint of all will be made in pamphlet form for the National Academy of Visual Instruction.

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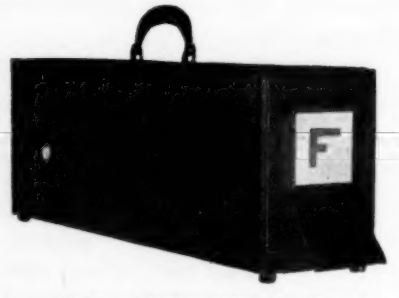

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The Contribution of the Motion Picture Division, Bureau of Foreign and Domestic Commerce, to Visual Instruction

EUGENE I. WAY

Chief, Industrial and Educational Section, Motion Picture Division, United States Bureau of Foreign and Domestic Commerce

IT doesn't seem reasonable to believe that the full responsibility of the production of successful pedagogical films should rest with the producer. I believe that their proper direction is a responsibility which should be shared by those interested in visual education and that advice should be given to the producer as to the direction of the film in such a way that that film will include those features which embody fundamental educational methods. The obtaining of such a consensus of opinion as expressed by educational film users in these groups and individual schools can well be determined by such an unbiased governmental organization as the Section which I represent. It is suggested that acting in the capacity of an intermediary agent, this Section can place your individual and collective suggestions before the industry as such for their consideration.

During the brief two-and-one-half years of our existence, many major problems have been brought to us with the request that fundamental data be secured for members of the non-theatrical motion picture trade. Because this industry represents a group primarily engaged in the promotion of visual education by means of motion pictures, practically all of their activities affect the members of the National Academy of Visual Instruction in one way or another. These inquiries have related to such subjects as sales policies in the expansion of foreign markets by individual companies; comparisons of the use of standard and narrow width films for production purposes; the possibilities of sound in this field, (as an example the comparison of the relative markets for sound-on-film and the disc method); advice as to the types of projection equipment; copyright and tariff regulations; color photography and a host of other subjects. There is a constant in-flow of inquiries as to where films may be secured on specific subjects. Thus it may be seen that this Section is an intermediary agent between the producer-distributor on one side and the exhibitor on the other.

In addition, publications have been issued on such subjects as "Markets for Industrial and Educational Films Abroad," "Trade Opportunities" and a "Composite List of Non-theatrical Film Sources". Foreign and Domestic news items are issued under the title "Industrial and Educational Film Notes".

It is interesting to note that while much is being done at home in the development of educational films, it is equally true that almost all other nations of the world are progressing along the same line. The newly formed "International Cinematographique Institute" operates under the auspices of the League of Nations to make research into the educational motion picture activities of all countries. Governmental organizations of foreign powers are studying and are producing films to coincide with their educational policies.

Some time ago our Section requested the various foreign offices of the Bureau to determine whether or not foreign films could be secured on an exchange basis. A number of offices reported that a considerable interest had been demonstrated in this project as proposed. The advantage of such a project, as I see it, would be that it would permit educationalists to study at first hand and to use the best product of other nations in the

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making of educational films, and it would, at the same time, assist American producers to place their product before the foreign buyer.

A survey is being made by the Industrial and Educational Section with a view of determining the value of motion pictures in education. Over 26,000 questionnaires have been mailed to the primary and secondary schools in the United States; over 10,000 returns have been received to date.

Our report of this survey will include a summary of the individual returns and will discuss such subjects as—the scope of exhibition of motion pictures in primary and secondary schools, a comparison of the general attendance figures to motion picture exhibitions state by state, giving in this instance a listing of the names of the cities using motion pictures, setting forth such other information as the number of exhibitors in that city last year as well as the average and total attendance.

Indications will be made as to the extent of exhibition in states and cities, as to the use of films in teaching curricular and extra curricular subjects such as physical education, adult education, social sciences, natural sciences, English, mathematics, vocational education and other subjects in kindergarten, elementary, junior and senior high schools. Discussion will be made of individual methods used for the improving of exhibition values to the student, which give consideration to the study of teachers' aid pamphlets, including such items as their value, percent of teachers using them and suggestions for their improvement. Outstanding research experiments will be reviewed with the idea of developing constructive suggestions on the improvement of visual methods used.

Similar research projects, designed to develop information in all other branches of the production, distribution and exhibition of non-theatrical films, are included in our program of future activities. The data obtained from such research, trade reports covering products, and experiences of the trade in the production, distribution and exhibition of films, supplemented by continuous field work on the part of the Bureau staff is adding to a fund of information now on file in the Motion Picture Division. This information is available to you if you care to use it. Your inquiries will be given every possible attention.

Visual Instruction News

The "Visual Instruction News" is the title of a printed bulletin issued by the Bureau of Visual Instruction in the University of Kansas. It serves to give publicity about visual instruction activities in the state and to arouse interest in visual instruction. The editor is Ellsworth C. Dent, Secretary of the Bureau of Visual Instruction. At our request he has written the following note describing the success of this paper:

We found it necessary to issue, from time to time, mimeographed or printed bulletins announcing changes in our service and additions to the service, so it was considered to be a worthwhile enterprise to publish this bulletin regularly. It was started in the fall of 1927 and two numbers were released during 1927-28.

Our schedule for 1929-30 included the publishing of four issues starting out in the fall with an eight-page folder, changing to sixteen pages in December and holding that size through the year. Next fall we expect to start out with a twenty-four-page bulletin.

Visual Instruction News is mailed to all superintendents and principals of first, second and third class cities in Kansas, to about 400 school executives in Oklahoma and to any others who may have requested the bulletin. It is our plan to increase the distribution just as there is a demand for it.

The growth in circulation and value of *Visual Instruction News* is indicative of what could be accomplished in other states. Mr. Dent is to be congratulated.

AMATEUR FILM MAKING

Conducted by DWIGHT R. FURNESS
Director of Publicity, Methodist Episcopal Board of Education

A Real Church Movie

One hears so much talk about movies and the Church, and so little happens, that when one church steps out and makes a real movie, it is time to take heart.

To celebrate the 80th anniversary of its founding Fayette (Iowa) Methodist Episcopal Church has made an historical film, titled "The Call of High Memories", depicting its history. The scenario was written by the pastor, John D. Clinton. The filming was done by Professor G. C. Mirick, a local bandsman and movie enthusiast.

The Rev. Clinton writes, "We shot solid all one Saturday and the following Sunday. We needed a Milwaukee train in one shot and Vice-president Gillick authorized the stopping of an afternoon passenger half an hour to accommodate. The American Legion needed for a military funeral got out fourteen men in uniform, which is some record this far after the war—and so it went. For re-shooting we needed another Saturday afternoon. I had bankers and printers make the titles. The picture cost $100.00 and it has been practically paid for by five-dollar contributions from families who have sickness in the home and want a home show that much worth. We plan to use it as a basis for the 100th anniversary 20 years from now and won't it be some show then for all of us?"

The film shows the organization of the church in a pioneer's cabin with five members, by John Hindman, the circuit rider; the removal to the chapel of Upper Iowa University, where the advent of a reed organ caused some of the brethren to drive to the next town rather than try to worship in the same room with such a mechanical distraction; the Indians lurking outside, the sleigh bells mingled with the church bells; the raising of the money for the new church; and the service which the modern church gives to the town.

Summer Movies

Many teachers spend their summers adding to their knowledge of the subject they teach. The teacher of Botany may do some collecting to provide material for classroom demonstration. The Geology teacher collects rock and mineral specimens. The language teacher visits different countries to become more familiar with the languages.

The teacher who takes a motion picture camera on his journey increases the benefit from it in two ways. A ceaseless quest for things to shoot develops a habit of observation and evaluation of things seen. The film record of a summer's travel provides in many cases valuable material for classroom work.

Let's consider some specific instances. The botanist goes to a region on a collecting trip and takes his movie camera with him. Ordinarily he would bring back a few dried herbarium specimens and copious notes but if in addition he has taken movies, he can show his classes actual pictures of where the collecting was done. The habitat of the plant becomes a dramatic set where this or that plant is carrying on its struggle for existence.

Geology is a particularly happy field for the amateur movie maker. The forces of nature are ever at work. The sea pounds incessantly on the shore, rivers are cutting their way through regions new and old geologically, here and there man has built great industries on mineral resources, vast panoramas tell a story recorded in rock formations—all subjects for the movie maker.

Only living persons use languages. The language teacher who adds movies to his pedagogical kit makes the study of speech more interesting because he is able to give his students a background that creates interest in a language.

Not only where one goes off by oneself to study but in summer schools or laboratories are movies useful. At many such centers teaching materials of great value have been accumulated over a period of years. Rare specimens, effective demonstrations, and methods of procedure when recorded in motion pictures are more graphic than even copious notes and make it possible for one to take back to his classrooms teaching films of great value.

An Interesting Hobby

A motion picture of a sunrise on the moon was made recently at Princeton with the aid of a telescope. Films made through the aid of microscopes are common. By varying the speed of cameras action may be speeded up or slowed down. Different color filters may be used to secure unusual effects.

AMONG THE PRODUCERS

Where the commercial firms—whose activities have an important bearing on progress in the visual field—are free to tell their story in their own words. The Educational Screen is glad to reprint here, within necersary space limitations, such material as seems to have most informational and news value to our readers

Harrington Group Vision Tester

A. O. POTTER

THE instrument shown in the accompanying illustration is manufactured by Spencer Lens Company, Buffalo, New York, after recommendation by F. E. Harrington, M. D., Director of School Hygiene and Commissioner of Health, Minneapolis, Minnesota.

It has been designed for the purpose of determining the acuity of vision of school children after the Snellen type test, but in such a manner that groups of fifteen may be tested.

Months of careful tests and extensive research were carried on by the manufacturers with the collaboration of Dr. Harrington before any announcement was made to the schools, and each step in the examination has been tested many times to prove its efficiency.

The test letters are produced on loops of standard Motion Picture film and projected onto a screen in the front of the tester. The pupils are arranged in a semicircle on a radius of twenty feet from the screen and are given an eye shield and a test sheet.

The left eye is shielded and the right eye tested, then a shift is made and the left eye is tested. The letters, in progressively smaller size, are projected on the screen and the pupils record what they see.

Many different arrangements of test characters were tried and for the different grades and types of pupils, four separate films are supplied.

Film No. 1 is composed of all letters from the largest (150′) Snellen size to the smallest (20′) Snellen size. This is considered the standard and is the one most commonly used. It is adaptable to all grades.

Film No. 2 is similar to No. 1 as regards size but the characters are all numbers instead of letters. This film is to be used for small children who are more familiar with numbers and who are able to write them better than letters.

Harrington apparatus for group vision testing.

Film No. 3 is the same as No. 1 as regards size but the characters are mixed letters and numbers and is particularly recommended for higher grades. The idea is to prevent the cautious child from finding the test too easy.

Film No. 4, the characters in this film are all letters but with the sizes reversed; that is, it begins with the smallest, (20′) Snellen size. This film is used as a recheck on certain groups of advanced students to determine, if possible, when clear vision is manifest by the footage first picked up.

This method of testing the acuity of vision of school children was first tried in the Minneapolis Public Schools and a very favorable result was reported. The tests are very satisfactory and it is a great time-saver by testing the eyes of fifteen pupils in about six minutes. Dr. Harrington has tested as many as six hundred pupils in a day.

Its practicibility has been proven. For group vision testing, it meets a demand when large numbers of visions are to be checked. It will eliminate from further consideration the normal vision and will pick out for more detailed examination, the child whose vision needs assistance.

Talking Pictures for Business and Industry

A deal has been consummated between the Western Electric organization, through its subsidiary Electrical Research Products, and Metropolitan Sound Studios of Hollywood whereby Metropolitan will immediately launch production of business and commercial talking films. Western Electric has recently introduced portable projecting outfits which will be used by business firms, factories, civic and professional associations and trade bureaus to show the pictures which will be made, and which will be an entirely separate and distinct field from the entertainment branch of the industry.

The filming of industrial pictures, it is expected, will stimulate business expansion abroad as well as at home, because it will now be

possible for the star salesman, on film, to carry the factory and products visually around the world, addressing the people in any language. The talkies will thus be a sort of super-salesman of modern business. Great avenues are also opened up for use by civic, professional, and trade associations in educational work, explaining factory processes, health talks, sales messages, as well as addresses at conventions and gatherings of all kinds, synchronized to moving pictures which are either new or old of related subjects.

A recent example of the value of talkies was when John D. Rockefeller from his home, addressed via the talkies a gathering of the Standard Oil Company in Cleveland, Ohio. Many manufacturers are planning to have pictures made of their factories and processes, to be accompanied by sales talks, and run regularly at their branch offices in various widely scattered territories by the use of small portable projection outfits.

Plans are also being made by several large organizations for talking pictures as demonstrations of their products to be shown at the next World's Fair in Chicago, and at similar exhibits in other localities.

Business Has a New Ally in the DeVry Industrial Cinetone

The Q R S—DeVry Corporation of Chicago has just released an announcement of their new 16 mm. Cinetone talking picture equipment which is an innovation in its forceful effectiveness as an aid to sales, advertising and publicity.

The Cinetone is one combined unit, comprising a 16 mm. projector and 16 inch 33-1/3 R. P. M. phonograph record turn table. Synchronous motor operates both projector and turn-table simultaneously. There is no chance for imperfect synchronization. Both projector and turn-table cannot operate except at a fixed speed.

Instead of several units to assemble, the Cinetone is one integral unit. The amplifier is of the latest design, employing only one 224 screen grid tube, one 250 amplifier tube and one 281 rectifier tube. As in the case of radio amplifiers, when used on direct current a converter is necessary.

Brilliant illumination, to meet all 16 mm. requirements, is accomplished through the use of a 20 volt. 250 watt prefocus projector lamp 110 alternating current. The Cinetone has a self-contained transformer which converts 110 volt to 20 volt.

Absolute control of volume to meet all requirements of room size or accoustics is provided by a volume control at the base of the cinetone, thereby making possible the fade out or swell out of sound from a whisper to such volume as is suitable for large gatherings.

The lens used is the new powerful "Big Bertha" Graf 2 inch Anastigmat. This in conjunction with the New DeVry Condenser, makes the most perfect optical system ever employed in DeVry projectors. So powerful is the light that at a 50 foot throw, a brilliant illumination over an area of more than 8 feet on the screen is clearly projected.

The 16 inch record operating at 33-1/3 R. P. M. is professional in size and speed, thereby accommodating 400 feet of 16 mm. film (the equal of 1000 feet of 35 mm.) In other words, the record will operate throughout the entire showing of one full reel of film.

The DeVry Cinetone is already being accepted by manufacturers and other users of industrial and educational films with unusual enthusiasm. It is further interesting to note that dealers in amateur motion picture apparatus are ordering and delivering the

The DeVry Cinetone

Cinetone for home use. Several film producers are already equipped and making releases on 16mm. and 16 inch 33-1/3 R. P. M. records of comedies, etc. This foretells the coming advent of the use of talking movies in the home and which will doubtless soon result in some of the larger productions in the professional field being released for home consumption.

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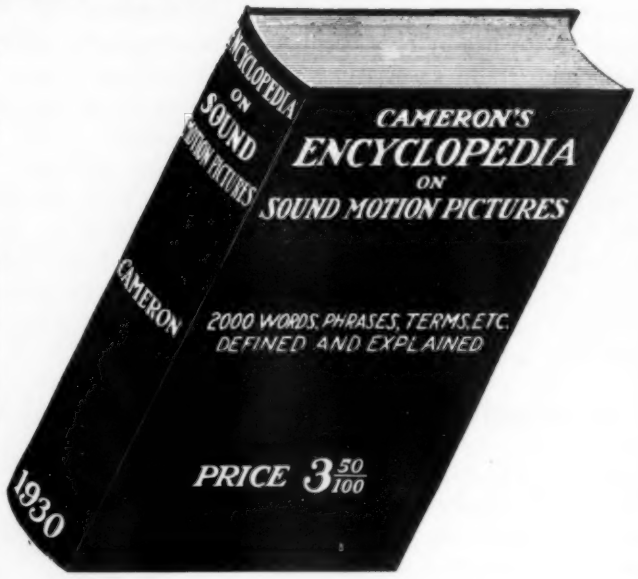

Cameron Publishing Company Manhattan Beach, Brooklyn, New York

Visual Education in Europe

(*Concluded from page* 102)

ship-builders, chemists and others have made their contributions to the welfare of Cleveland. It is clear that if industrial progress is to continue our people must have institutions which honor the inventor and spread appreciation of the invention. The industrial museum is peculiarly adapted to enthuse the youth and the worker.

Adult Education Seeks Practical Application of Knowledge

Germany's remarkable advance in commerce and ship-building, in chemical industry, and in many fields of applied science is due to its educational ideals. We have criticized the thoroughness in the basal schools, but the results of it we cannot ignore. The wide use of concrete materials and the practical application of their knowledge is noteworthy. The growth of Air Training Schools, Auto Repair Courses, Y. M. C. A. Trade Courses, Vocational Courses, Business High Schools, and Training Schools established by the large corporations are an indication of the great need of the present, of more knowledge by adults in the field of science in industry. Adult training is more in the practical arts than the liberal arts.

The Industrial Museum of Munich is an institution well designed to interest adults in the facts of industrial life. This institution has besides its attractive displays, special lecture courses illustrated by motion pictures and slides. It also makes special provision for adult classes and groups of school children. The museum also publishes excellent pictures and booklets. This museum is the best illustration of applied visual instruction in science on the continent.

The above is the fifth article in the series of seven. The sixth article will appear in the May issue.

Book Reviews

(*Concluded from page* 110)

ica sport has helped to carry into a new civilization some of the best elements of a vanished age."

Words of commendation are all too feeble in attempting to do justice to the scholarly excellence of the series. A reviewer's enthusiasm will be more than justified in an examination of the volumes themselves, which can be truly appreciated only when they are seen—and once seen, it would be difficult to imagine a library, public, institutional or private, which could be considered complete without them.

Not only do the volumes re-create history in a pictorial record that sheds remarkable light upon the past, but interprets the present for us as well. Lasting glory is due to authors, editors and publishers, who have devoted nine years of untiring effort to the project and have made historical literature immeasurably richer for their enterprise.

M. E. G.

Bibliography on the Use of Visual Aids in Education

By JOSEPH J. WEBER, PH. D.
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Editor's Note—This is the fourth installment of the Bibliography which is appearing serially in The Educational Screen from January to June, 1930. The Table of Contents for this complete Bibliography was printed with the first installment. (See page 29 of the January issue).

(II MOTION PICTURES)

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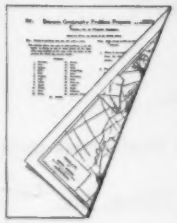

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